

United States  
Department of the Interior  
Geological Survey

**High Resolution Uniboom Seismic Reflection Profiles Collected  
August 25 Through October 5, 1977 on the Beaufort Sea**

By  
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This report is preliminary and has not been edited or reviewed for conformity with Geological Survey standards or nomenclature.

The U.S. Geological Survey conducted a cruise in the Beaufort Sea from the *R/V Samuel P. Lee* during August 25 through October 5, 1977, as part of a resource assessment of the outer continental shelf north of Alaska. The study area lies between 141° West and approximately 160° West longitude and extends from the 20 meter isobath north to approximately 73.5° North latitude.

Single-channel high-resolution (Uniboom<sup>1</sup>) continuous seismic-reflection profiles were collected along 62 tracklines with a total trackline distance of 4,584 km. The Uniboom<sup>1</sup> hull transducers had a power range of .6 to 1.2 KJ. The recording system had a high cut filter range of 1,100 to 1,500 hz. Data were recorded onto paper rolls.

Navigation during the survey was done by the scientific staff using a Marconi<sup>1</sup> integrated satellite/doppler navigation system. Navigation information was digitized and then computer plotted onto a polar stereographic projection at a scale of 1:500,000.

Microfilm copies of the high-resolution (Uniboom<sup>1</sup>) continuous seismic-reflection profiles can be purchased from the NOAA, National Geophysical Data Center, Boulder, CO, 80305. The data were filmed at the Pacific Arctic Branch of Marine Geology in Menlo Park, CA 94025.

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<sup>1</sup> Use of trade names within this report is for purposes of identification only, and does not constitute endorsement by the U.S. Geological Survey.

Base from Jonathan Greenburg, Patrick E. Hart, and Arthur Grantz, in press, Bathymetric Map of the Continental Shelf, Slope, and Rise of the Beaufort Sea North of Alaska: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-1182.